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| Office Action Summary | Application No. | Applicant(s) | |
| | 10/623,258 | SEARCY ET AL. | |
| | Examiner | Art Unit | |
| | SCOTT L. JARRETT | 3623 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 February 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-44 is/are pending in the application.
 4a) Of the above claim(s) 9-17 and 27-35 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-8, 18-26 and 36-44 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 18 July 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>3/5/08</u> . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/27/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Non-Final Office Action is in response to Applicant's submission filed February 4, 2008. Currently Claims 1-44 are pending with claims 9-17 and 27-35 being withdrawn as directed to a non-elected invention.

Election/Restrictions

2. Upon review of the claims, as originally filed, Examiner notes there was a typographical error the Election/Restriction requirement mailed January 29, 2008. Specifically claims 9-17 were indicated, incorrectly, as belonging to Invention I wherein fact claims 9-17 are directed to method for synchronizing production by determining a routing schedule, classified in class 705, subclass 8 and should have been included in the claims drawn to Invention II.

Examiner and Mr. Stephen Terrille reviewed this oversight in an interview held March 5, 2008 wherein Mr. Terrille agreed that claims 9-17 are directed to Invention II and gave permission for the examiner to examine Group I claims on their merits. The election/restriction requirement should have read as follows:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, 18-26 and 36-44, drawn to system/method for scheduling a factory to complete manufacture of an item during a shipping window , classified in class 705, subclass 8.

Art Unit: 3623

II. Claims 9-17 and 27-35, drawn to method/system for synchronizing production by determining a routing schedule, classified in class 705, subclass 8.

Claims 9-19 and 27-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on February 4, 2008 and in the interview held March 5, 2008.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-8, 18-26 and 36-44 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 7, 18-22, 24, 36-39 and 41 of U.S. Patent No. 6,934,594. Although the conflicting claims are not identical, they are not patentably distinct from each other because determining a carrier service for shipping an item is old and very well known.

Accordingly it would have been obvious to one skilled in the art at the time of the invention that method/system for scheduling manufacture of an item in a factory, would have benefited from the well known selection of a carrier (third-party logistics provider, shipper, freight forwarder, etc.) as part of determining a shipping window so as to allow an item to be shipped to a destination.

Further it is noted that deletion of the element with a corresponding loss of function" has been held to be obvious (In re Karlson, 136 USPQ 184, 186; 311 F2d 581 (CCPA 1963)).

Title

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: System and method for scheduling a factory to complete manufacture of an item during a shipping window.

Claim Objections

6. Claims 1-8, 18-26 and 36-44 are objected to because of the following informalities: Claims 1, 18 and 36 recites "so as to have the manufacture of the item to complete" and "so as to allow the item to be shipped..." wherein it is noted that the item is not actually manufactured during a shipping window or subsequently shipped.

Examiner suggests Applicants amend the claims to recite that the system/method actually manufactures the item during the shipping window and ships the item via a lower cost shipping method wherein the shipment is scheduled to arrive as if it was shipped via an expedited shipping method to overcome this objection. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3-4, 6, 18, 20-21, 24, 36, 38-39 and 41-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Corbett, Delivery Windows – A New View On Improving Manufacturing Flexibility and On-Time Delivery Performance (1992).

Regarding Claims 1, 18 and 36 Corbett teaches a system and method for scheduling manufacture of an item in a factor comprising:

- planning a time for manufacture an item to complete during a shipping (delivery) window (Column 1, Page 75; Column 2, Paragraph 2, Page 75; Figures 2-4; Page 76; Column 1, Page 77);
- determining the shipping window so as to allow the item to be shipped via a lower cost shipping method while arriving at a destination as if shipped via an expedited shipping method (e.g. on-time delivery).

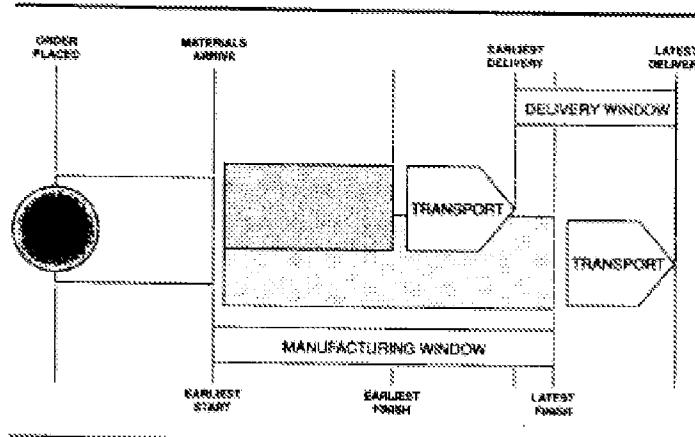


FIGURE 2: The delivery window concept

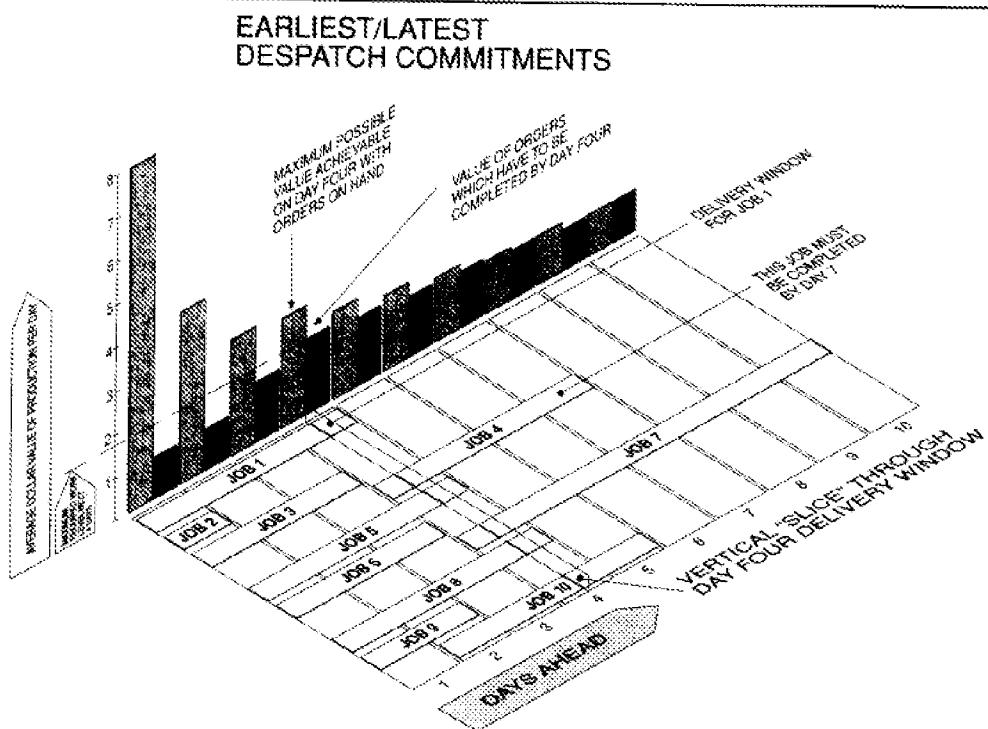


FIGURE 4: Earliest/latest despatch commitments

Regarding Claims 3, 20 and 38 Corbett teaches a manufacturing scheduling system and method wherein the item is in an information handling system (Column 2, Paragraph 2, Page 77; Figures 2-4).

Regarding Claims 4, 21 and 39 Corbett teaches a manufacturing scheduling system and method further comprising a destination (a destination is inherent in customer order requiring shipment/delivery) for the shipment of the item (Page 75; Column 2, Paragraph 2, Page 77).

Regarding Claims 6, 23, 24 and 41-42 Corbett teaches a manufacturing scheduling system and method further comprising determining a time of day that the planning is occurring (Column 1, Paragraph 3, Page 75; Column 2, Paragraph 2, Page 77).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 5, 7-8, 19, 22, 25-26, 37, 40 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbett, Delivery Windows – A New View On Improving Manufacturing Flexibility and On-Time Delivery Performance (1992) as applied to claims 1, 3-4, 6, 18, 20-21, 24, 36, 38-39 and 41-42 above, and further in view of Threatte et al., Tactical Shipping and Scheduling at Polaroid with Dual Lead-Times (2002).

Regarding Claims 2, 19 and 37 Corbett teaches a manufacturing scheduling system and method further comprising obtaining a customer order, including an customer ordered item (Column 1, Paragraph 3, Page 75).

While expedited shipping (priority, overnight, rush, etc.) shipping is an old and very common business practice wherein business' frequently use expedited shipping to ensure on-time delivery performance or customers desiring to receive their items as soon as possible Corbett does not expressly teach that the customer order desired shipping schedule corresponds to an expedited shipping method as claimed.

Threatte et al. teaches that the desired shipping schedule corresponds to an expedited shipping method (Column 1, Paragraphs 1-2, Page 1; Last Two Paragraphs, Page 3) in an analogous art of shipment scheduling for the purposes of providing a decision support system that “makes production scheduling and specifies shipping options to reduce total supply chain cost” (Abstract; Column 2, Paragraph 1, Page 1; Column 1, Last Two Paragraphs, Page 3).

Threatte et al. further teach that shipments of items include a destination (Column 2, Paragraph 2, Page 4).

It would have been obvious to one skilled in the art at the time of the invention that the manufacturing scheduling system and method as taught by Corbett would have benefited from utilizing an expedited shipping method in view of the teachings of Threatte et al.; the resultant system/method enabling businesses to reduce the costs associated with meeting customer shipments by choosing the lower cost shipping method (Threatte et al.: Column 2, Paragraph 1, Page 1; Column 1, Last Two Paragraphs, Page 3; Column 1, Bullet 7, Last Paragraph, Page 7).

Regarding Claims 5, 22 and 40 while determining the size, weight, etc. of shipments (orders) is old and very well known Corbett does not expressly teach determining a size of the order as claimed.

Threatte et al. teach determining a size of the order (volume; Column 2; Last Paragraph, Page 2; Last Paragraph, Page 4) in an analogous art of shipment scheduling for the purpose of ensuring things such as the order does not exceed the size/weight limits/maximums of the shipping method being considered.

It would have been obvious to one skilled in the art at the time of the invention that the manufacturing scheduling system and method as taught by Corbett would have benefited from determining a size of the order in view of the teachings of Threatte et al.; the resultant system/method (Threatte et al. Column 2; Last Paragraph, Page 2; Last Paragraph, Page 4).

Regarding Claims 7-8, 25-26 and 43-44 while air and ground shipping methods are old and very well known as it the practice of selecting the lowest cost shipping method to meet customer desired dates Corbett is silent as to the specific type (class, category, mode, etc.) of shipment method used and does not expressly teach ground or air shipments as claimed.

Threatte et al. teach a manufacturing scheduling system and method wherein the lower cost shipping method includes ground and the expedited (priority) shipping method includes air (Column 1, Paragraph 1, Page 1; Column 2, Paragraphs 1, 3-4, Page 2) for the purposes of providing a decision support system that “makes production scheduling and specifies shipping options to reduce total supply chain cost” (Column 2,

Paragraph 1, Page 1; Column 1, Last Two Paragraphs, Page 3; Column 1, Bullet 7,
Last Paragraph, Page 7).

It would have been obvious to one skilled in the art at the time of the invention that the manufacturing scheduling system and method as taught by Corbett would have benefited from considering/utilizing any of a plurality of well known shipping methods including but not limited to air and ground in view of the teachings of Threatte et al.; the resultant system/method enabling business' reduce the costs associated with shipping items (e.g. using the lowest cost shipping method that still meets the desired shipping window/date; Column 2, Paragraph 1, Page 1; Last Paragraph, Page 7).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Dietrich et al., U.S. Patent No. 6,032,121, teach a production scheduling and shipment planning system and method wherein the system/method schedules the lowest cost shipment method based on item/order information such as size, destination, customer delivery date, available shipment date, the costs and timing of various transportation/carrier resources.

- Kraisser et al., U.S. Patent No. 6,701, teach a system and method for determining and scheduling feasible shipments of items within shipping (delivery) windows.

- Wiesenmaier, U.S. Patent Publication No. 2002/1020533, teach a production and shipment scheduling system and method.

- Arunapuram et al., U.S. Patent Publication No. 20020019759, teach a order/item transportation management system and method for selecting the most appropriate transportation method (e.g. carrier, air, etc.).

- Streetman, U.S. Patent No. 2004/0054570, teach a system and method for planning and scheduling shipment of items to meet shipping windows.

- Cohodas, Finding the Right Distribution Software (1991), teaches the well known use of systems/methods for scheduling the manufacture of an item to meet a desired delivery (shipping window) in Just-In-Time manufacturing.

- Kraemer, Essays in production scheduling with just-in-time related performance measures (1994) teaches the well known and common use of due windows (e.g. window) in scheduling the manufacture and shipment of customer orders/items.
- Fully automated system achieves true JIT (1998), teaches a manufacturing scheduling system (MES) for scheduling the manufacture time of an item so as to have the manufacture of the item completed during a delivery (shipping) window.
- Garcia et al., Coordinated Scheduling of Production and Delivery From Multiple Plants and With Time Windows Using Genetic Algorithms (2002), teach a system and method for planning a time for manufacturing an item so as to have the manufacture of the item complete during a desired time window (shipping).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT L. JARRETT whose telephone number is (571)272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott L Jarrett/
Primary Examiner, Art Unit 3623